

Claims

1. A cultivation device (2) intended for the cultivation of soil and pulled by a vehicle, the device comprising a frame (6) with a drawbar (4) attached to the frame, or which frame (6) is intended to be coupled to a drawbar (4); an attachment shaft (8) for mouldboards (10', 10''), the shaft extending substantially in the direction of the longitudinal axis of the frame (6); and mouldboards (10', 10''); and a drawbar (4) which is coupled or can be coupled substantially centrally to the frame (6) so that the angle, between the longitudinal axis of the frame (6) being substantially transversal regarding the driving direction during cultivation and the drawbar (4) being substantially in parallel with the driving direction, is arranged to be adjustable,

characterised in that

 - a) there are two types of mouldboards (10', 10''); first mouldboards (10') which during cultivation turn the soil to the right in relation to the driving direction; and second mouldboards (10'') which during cultivation turn the soil to the left in relation to the driving direction;
 - b) the mouldboards (10', 10'') are fastened to the mouldboard attachment shaft (8) so that the first mouldboards (10') are substantially parallel in relation to each other, the second mouldboards (10'') are substantially parallel in relation to each other, and the first mouldboards (10') are directed in a substantially different direction in relation to the second mouldboards (10''); and
 - c) the mouldboard (10', 10'') attachment shaft (8) is arranged to be rotated around its longitudinal axis so that there are at least two attachment shaft (8) positions to be used in the cultivation; a first position where the first mouldboards (10') are arranged during cultivation to turn the soil to the right in relation to the driving direction; and a second position where the second mouldboards (10'') are arranged during cultivation to turn the soil to the left in relation to the driving direction.
2. A cultivation device (2) according to claim 1, **characterised** in that the cultivation device is a light cultivation device having a cultivation depth of about 5 to 15 cm, advantageously about 5 to 10 cm.
3. A cultivation device (2) according to claim 1, **characterised** in that the cultivation device is a plough with a cultivation depth of about 10 to 25 cm, advantageously about 10 to 20 cm.

4. A cultivation device (2) according to claim 1, 2 or 3, **characterised** in that the angle between the drawbar (4) and the frame (6) can be adjusted into at least two different positions, whereby in the first position the acute angle between the drawbar (4) and the longitudinal axis of the frame (6) is on the right side in relation to the driving direction, and in the second position the acute angle is on the left side in relation to the driving direction.
5. A cultivation device (2) according to any previous claim, **characterised** in that the angle between the drawbar 4 and the longitudinal axis of the frame 6 can be adjustable, advantageously in a stepless manner, between about 0° and 180° , advantageously between about 10° and 160° .
6. A cultivation device (2) according to any previous claim, **characterised** in that the first mouldboards (10') and the second mouldboards (10'') are mirror images of each other.
7. A cultivation device (2) according to any previous claim, **characterised** in that the mouldboard attachment shaft (8) is fastened at least at its both ends to the frame (6) of the cultivation device.
8. A cultivation device (2) according to any previous claim, **characterised** in that the mouldboard attachment shaft (8) is mounted in bearings at least at its both ends.
9. A cultivation device (2) according to any previous claim, **characterised** in that the mouldboard attachment shaft (8) can be rotated about 180° around its longitudinal axis, advantageously about 90° or 60° .
10. A cultivation device (2) according to any previous claim, **characterised** in that each mouldboard (10', 10'') is attached to the mouldboard attachment shaft (8) using at least one shear pin.
11. A cultivation device (2) according to any previous claim, **characterised** in that the cultivation device has a wheel or wheels (12), advantageously a wheel (12) at both ends of the frame (6), which wheels support the cultivation device (2).
12. A cultivation device (2) according to claim 11, **characterised** in that the height of the wheel or wheels is arranged to be adjustable, so that the cultivation depth of the cultivation device (2) is adjusted by adjusting the height.

13. A cultivation device (2) according to any previous claim, **characterised** in that an adjustment or some adjustments of the cultivation device; advantageously the angle between the drawbar (4) and the longitudinal axis of the frame (6) and/or the rotation of the mouldboard attachment shaft (8) around its longitudinal axis; is or are hydraulic.
14. A cultivation device (2) according to any previous claim, **characterised** in that the means (14), which rotate the mouldboard (10', 10'') attachment shaft (8) into the first and second positions, lock the attachment shaft (8) into the first position when soil is cultivated with the first mouldboards (10').
15. A cultivation device (2) according to any previous claim, **characterised** in that when the mouldboard (10', 10'') attachment shaft (8) is in its second position, which is used to cultivate the soil with the second mouldboards (10''), the shaft can not be rotated further in that direction, into which the force acting on the mouldboards (10'') tends to rotate said attachment shaft (8) during cultivation of the soil.
16. A cultivation device (2) according to any previous claim, **characterised** in that the cultivation device (2) comprises a rear harrow (46).